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Lionel LEGACY Crane Car Owner's Manual

Featuring



Congratulations!

Congratulations on your purchase of the Lionel LEGACY Crane Car! The crane car is designed for use with a LEGACY Command Base and LEGACY CAB-2 Remote Controller (6-14295), available separately. The Crane Car can also be operated on the original Lionel TrainMaster Control System and the LEGACY Cab 1L / Base 1L, also available separately.

Caution To prevent damage, disengage the gears before you rotate the cab by hand. Refer to page 9 to disengage the gears.

Features of the Crane Car

- Command Control equipped
- 360-degree cab rotation
- Up and down operation of the boom
- Independent control of the main and auxiliary hooks
- Deployment of all six outriggers
- Dual ElectroCouplers
- Four powerful maintenance-free motors
- Operating front and rear work lights
- Opening cab doors
- Six outrigger supports for O gauge and FasTrack track

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Preparing the Crane Car for operation

To prepare the Crane Car for operation, press the small gear back into position, gently swivel the cab until the teeth align. Slide the lever back towards the gears to lock the gears in position. See Figure 1.

Note Sliding the lever back towards the gears is also done to allow the crane to be placed in the box for storage without damage.

When you are ready to store your Crane Car, be sure to use rubber bands to keep tension on the hook lines. Use your remote to position the boom to fit in the foam cavity. As illustrated in Figure 1, open the front right-hand cab door and slide the lever towards the boom to disengage the cab rotation gears.

Note Always keep light tension on the hooks when the Crane Car is off the track.

Caution To prevent damage, disengage the gears before you rotate the cab by hand.

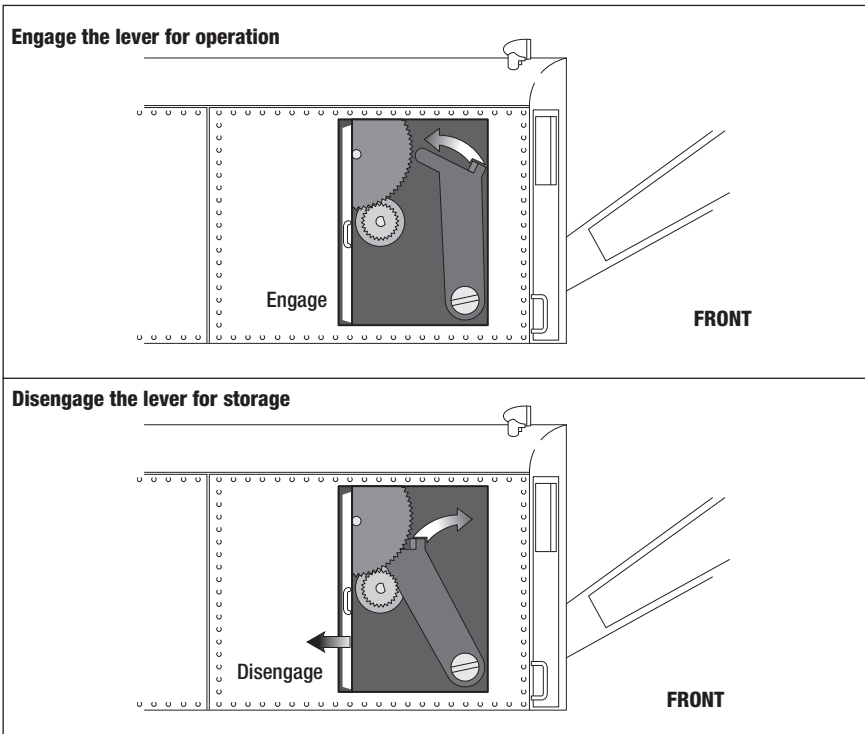


Figure 1. Preparing the Crane Car for operation and storage

Capabilities of the Crane Car

Your Crane Car was designed to hoist objects when properly supported by the outrigger supports from a stationary position. When the boom is raised to its highest point, the main hook is capable of hoisting about 19 oz (1-1/5 lb) and the auxiliary hook is capable of hoisting about 14 oz (7/8 lb). When the boom is lowered to its lowest point, the main hook is capable of lifting about 12 oz (3/4 lb) and the auxiliary hook is capable of lifting about 7 oz (7/16 lb). Avoid lifting heavier objects to prevent damage to the Crane Car.

Operating the Crane Car

To operate the Crane Car, you will need to use a Command Base and Remote Controller (LEGACY CAB-2, CAB-1L, or CAB-1; all available separately).

1. With track power off, place the Crane Car on the track. Be sure that the RUN/PROGRAM switch is in the RUN position. See Figure 2 on page 7.
2. Make sure that the Command Base is plugged in and connected.
3. Power up the track. After five seconds, the front and rear work lights will illuminate. The Crane Car begins searching for the Command Control signal sent automatically by the Command Base. After another five seconds, the Crane Car will be ready for operation.
4. Address your Crane Car using your Remote Controller. Press ENG and 1 on the numeric keypad of your Remote Controller.

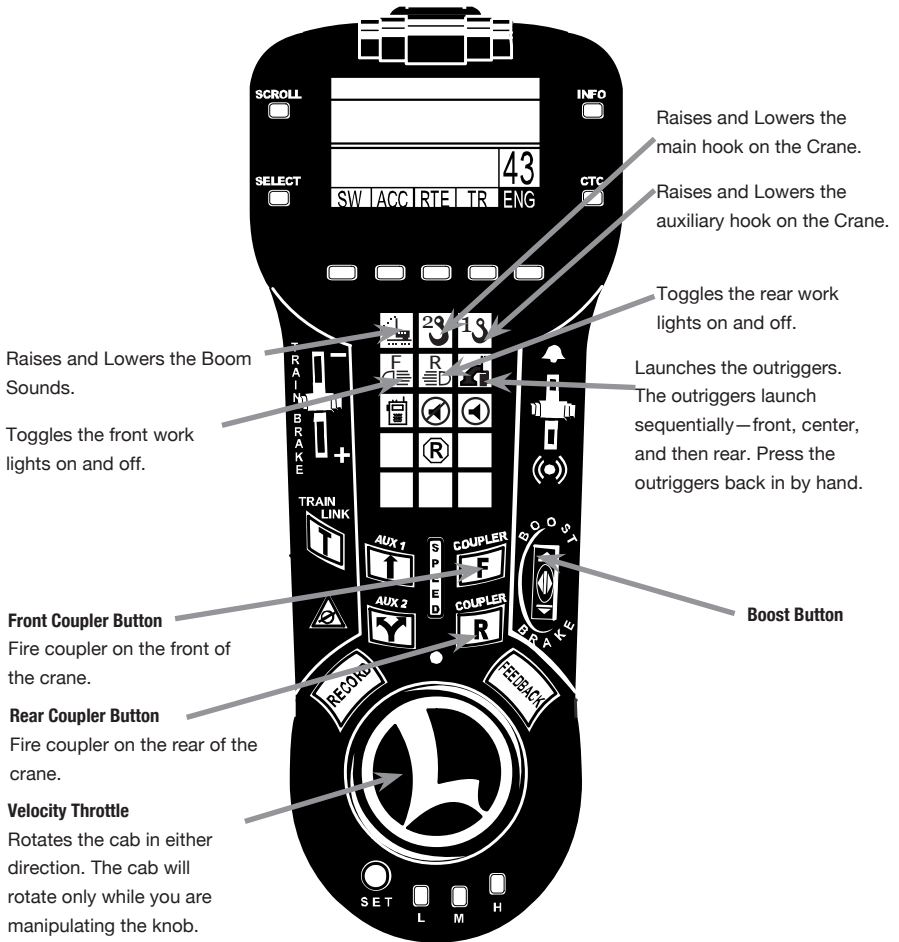
Note Your Crane Car is factory programmed with an ID# of “1.” To change the ID#, see page 7.

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Lionel®, *LionChief™*, *LionChief Plus™*, *TMCC®*, *LEGACY®*, *FasTrack®*, *TrainMaster®*, *Odyssey®*, *RailSounds®*, *CrewTalk™*, *TowerCom™*, *DynaChuff™*, *StationSounds™*, *Pullmor®*, *ElectroCoupler™*, *Magne-Traction®*, *CAB-1® Remote Controller*, *American Flyer®*, *Lionel ZW®*, *ZW®*, *MagniVision®*, *TMCC®*, *Lionelville®*, *Wireless Tether™*, *Powerhouse™*, *LionMaster®*, *Conventional Classics™*, *Postwar Celebration Series™*, *TruRail™*, *PH-1 Powerhouse®*, *Powermaster®*, *Powerstation-Powerhouse®*, *Accessory Motor Controller™*, *AMC™*, *Accessory Switch Controller™*, *ASC™*, *Action Recorder Controller™*, *ARC™*, *Track Power Controller 300™*, *TPC 300™*, *Track Power Controller 400™*, *TPC 400™*, *Block Power Controller™*, *BPC™*, *Operating Track Controller™*, *OTC™*, *FatBoy™*, *Lionel Lines®*, *Joshua Lionel Cowen Series™*, *Lockon®*, *TrainSounds™*, *MultiHorn™*, *MultiWhistle™*, *Choo-Choo™*, *SensorTrack™*, *Plug-n-Play™*, *Imagineering™*

The LEGACY CAB-2 Remote Controller

Use your CAB-2 Remote Controller to operate your crane car.



Note You can operate the hooks or the boom while the cab is rotating.

Caution Do not allow the hook to go all the way down and then start to ascend again. If you notice that the hook begins to ascend when it reaches its lowest point, press and hold the BOOST button immediately to avoid reversing the controls.

Note We recommend that you keep a light weight on the auxiliary hook for optimal performance.

Note The front and rear work lights always turn on when the Crane Car is powered up. When you launch the outriggers or release an ElectroCoupler, these features will become inactive for ten seconds to prevent overloading the electronics.

CAB-1 & CAB-1L Remote Controller commands

Use your CAB-1 Remote Controller to operate the crane car.

 Releases the ElectroCoupler on the rear of the Crane car.

 Releases the ElectroCoupler on the front of the Crane car.

   Lowers the Boom sounds.

   Raises the Boom sounds.



Rotates the Crane cab.

Note You can operate the hooks or the boom while the cab is rotating.

   Lowers the main hook on the Crane.

   Raises the main hook on the crane.



Caution Do not allow the hook to go all the way down and then start to ascend again. If you notice that the hook begins to ascend when it reaches its lowest point, press and hold the BOOST button (up arrow) immediately to avoid reversing the controls.

   Lowers the auxiliary hook on the Crane.

   Raises the auxiliary hook on the Crane.

Note We recommend that you keep a light weight on the auxiliary hook for optimal performance.

  Toggles the front work lights on and off.

  Toggles the rear work lights on and off.

  Launches the outriggers.

Note The front and rear work lights always turn on when the Crane Car is powered up. Use AUX1, 4 and AUX1, 5 to turn off the lights. When you launch the outriggers or release an ElectroCoupler, these features will become inactive for ten seconds to prevent overloading the electronics.



Using the outrigger supports

Your Crane Car includes six outrigger supports for O gauge and FasTrack track. Launch the outriggers, then position the appropriate supports beneath them.

Note When the outriggers are launched, you may find that any locomotive in operation briefly slows and the headlights and interior lights momentarily flicker. If a battery is not installed, the RailSounds sound system will restart. For optimal performance, we recommend using a transformer capable of seven to ten amps.

Assigning a new ID to your Crane Car

As your fleet of LEGACY or TMCC equipped locomotives and equipment grows, you will want to assign each unit a unique ID#. Use your CAB-1, CAB-1L, or CAB-2 Remote Controller.

1. With track power off, place the Crane Car on the track.
2. Make sure that the Command Base is plugged in, then power up the track.
3. Slide open the small door on the left-hand side of the cab and slide the RUN/PROGRAM switch towards the top of the car. Refer to Figure 2.
4. Press ENG.
5. Enter the ID# for the Crane Car using the numeric keypad on the Remote Controller. Select any number between 1 and 98.
6. Press SET.

Note The lights will flash when SET is pressed.

7. Slide the RUN/PROGRAM switch to the RUN position and replace the roof.

Note The lights will flash on and off when no command signal is present.

At this point, the new ID# has been set. When you power up, be sure to address the Crane Car using the new ID#.

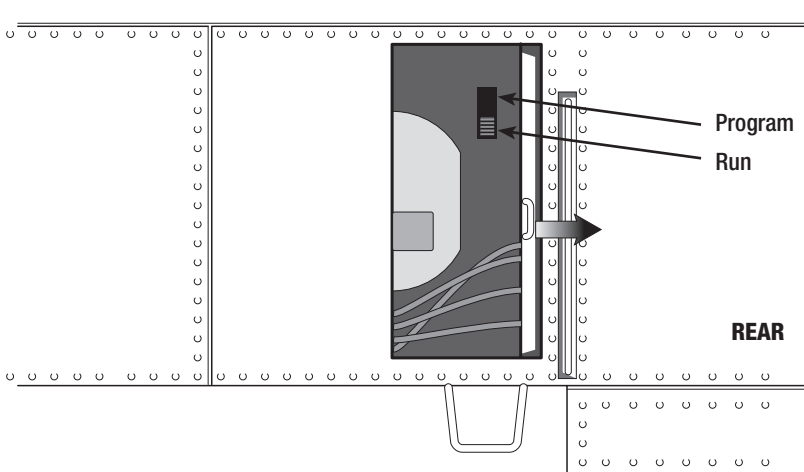


Figure 2. Switch location

Placing the Crane Car on a conventional layout

Your Crane Car was designed for operation on a Command Control layout. Each feature is accessed through the Remote Controller.

If you choose to place the Crane Car on a conventional (non-Command) layout, be sure to slide the RUN/PROGRAM switch to the PROGRAM position. Operating the unit with the switch in the RUN position will cause sporadic operation of the motors.

To couple your Crane Car to a locomotive or other rolling stock in the conventional environment, you will need to rely on the magnetic couplers on the other equipment. The ElectroCouplers will not open by hand or with a Remote-Control Track section.

Installing the cab locking pins

You may choose to install the cab locking pins to simulate these details found on prototypical cranes. As illustrated in Figure 3, insert the pins into the channels on the cab and through the eyelets on the frame.

Caution The pins are aesthetic detail pieces only. Do not attempt to rotate the cab with the pins in place. The pins should not be used to secure the cab.

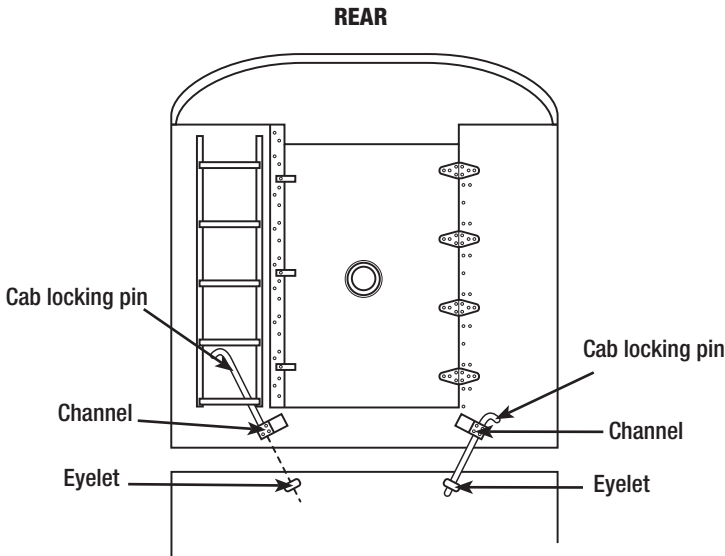


Figure 3. Cab locking pins

Storing the crane car

When you are ready to store your Crane Car, be sure to use rubber bands to keep tension on the hook lines. Use your remote to position the boom to fit in the foam cavity. As illustrated in Figure 4, open the front right-hand cab door and slide the lever towards the boom to disengage the cab rotation gears.

To engage the gears, press the small gear back into position, gently swiveling the cab until the teeth align. Slide the lever back towards the gears to lock the gears in position.

Note Always keep light tension on the hooks when the Crane Car is off the track.

Note To prevent damage, disengage the gears before you rotate the cab by hand.

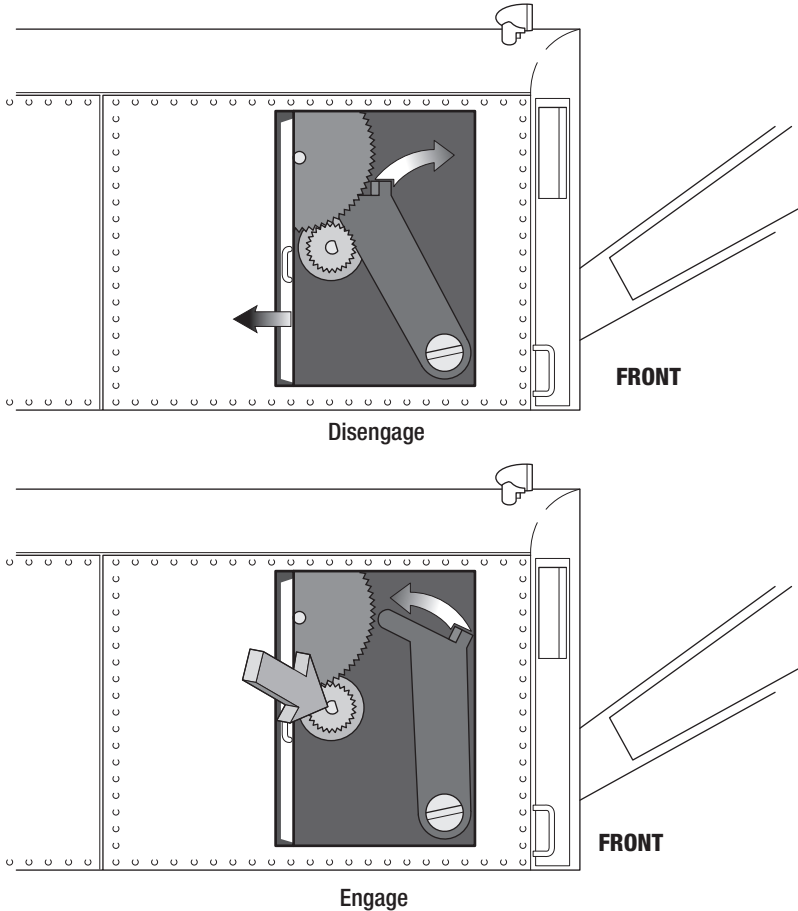


Figure 4. Disengaging the cab rotation gears

Restraining the crane car

To keep the strings running through the pulleys, it is important to keep the hooks under a small amount of tension. In the event that the strings slip out of the pulleys, you may use tweezers and a pin to reposition the strings. Be sure to position the strings as discussed in this section to prevent the strings from breaking.

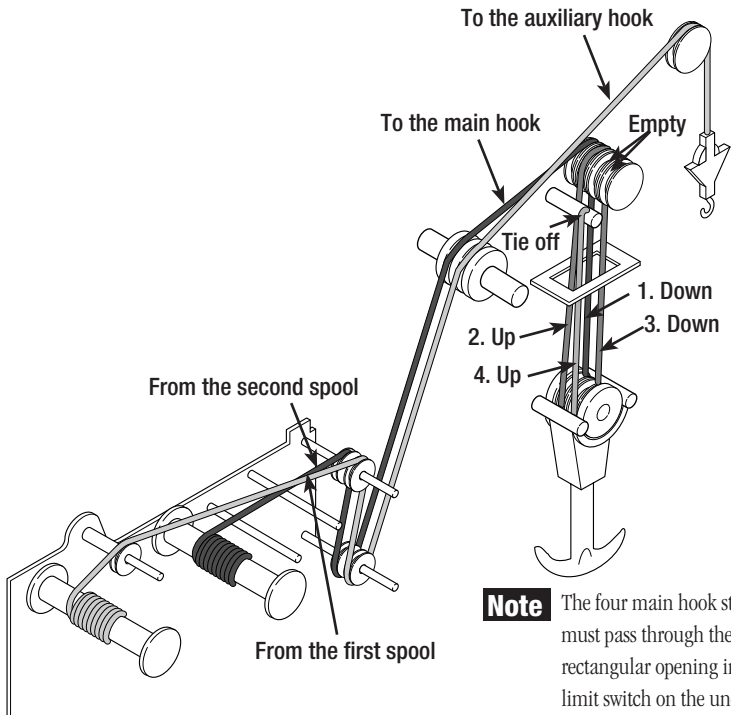
Note If a string breaks, do not attempt to knot the string. See your authorized Lionel Service Center or Lionel Service for a non-warranty repair.

Auxiliary hook

The auxiliary hook is operated using a single string, which is approximately 48 inches long. This string originates on the spool at the rear of the cab, travels over two pulleys, inside the cab, under the pulley at the base of the boom, over a pulley at the top of the boom, and terminates at the hook. Refer to Figure 4.

Main Hook

The main hook is operated using a single string, which is approximately 96 inches long. This string originates on the second spool from the rear of the cab. Refer to Figure 5 to route the string. Please note that the string travels through only the two center pulleys on the hook and the two left-hand pulleys on the boom. Refer to Figure 4.



Note The four main hook strings must pass through the rectangular opening in the limit switch on the underside of the boom (not shown).

Figure 5. Routing the main hook string

Restringing the crane car continued

Boom

The boom is operated using a single string with both of its ends attached to the same spool, which is approximately 96 inches long. This loop of string passes through a pulley system on the right and left sides. Refer to Figure 6 to route the string.

Note The rigging is mirrored on the other side.

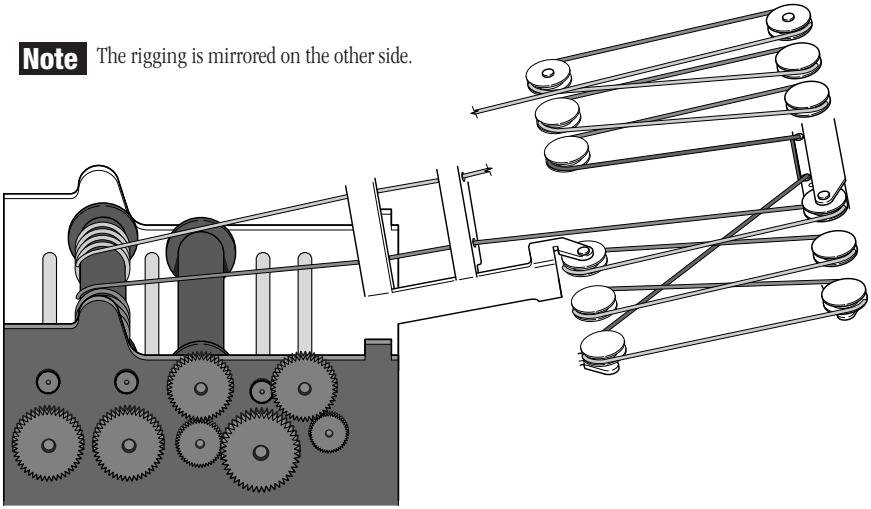


Figure 6. Routing the boom string

Replacing the lamps

Your Crane Car is illuminated by several LEDs. The LEDs are expected to last for the life of this product and are not user serviceable. Contact Lionel Service if your LEDs need replacing.

Lionel Limited Warranty Policy & Service

This Lionel product, including all mechanical and electrical components, moving parts, motors and structural components, with the exception of **LIGHT BULBS, LED's & TRACTION TIRES** are warranted to the original owner-purchaser for a period of **one year from the original date of purchase** against original defects in materials or workmanship when purchased through a **Lionel Authorized Retailer***.

This warranty does **NOT** cover the following:

- Normal wear and tear
- Light bulbs or LED's
- Defects appearing in the course of commercial use
- Damage resulting from abuse/misuse of the product

Transfer of this product by the original owner-purchaser to another person voids this warranty in its entirety. Modification of this product in any way; visually, mechanically or electronically, voids the warranty in its entirety.

Any warranted product which is defective in original materials or workmanship and is delivered by the **original owner-purchaser** (this warranty is non-transferrable) to Lionel LLC or any Lionel Authorized Service Station **MUST** be accompanied by the original receipt for purchase (or copy) from an **Authorized Lionel Retailer***, will at the discretion of Lionel LLC, be repaired or replaced, without charge for parts or labor. In the event the defective product cannot be repaired, and a suitable replacement is not available, Lionel will offer to replace the product with a comparable model (**determined by Lionel LLC**), if available. In the event a comparable model is not available the customer will be refunded the original purchase price (requires proof of purchase from the **Authorized Lionel Retailer*** it was originally purchased). Any products on which warranty service is sought must be sent freight or postage prepaid (Lionel will refuse any package when postage is due). **Transportation and shipping charges are not covered as part of this warranty.**

NOTE: Products that require service that do not have a receipt from a LIONEL AUTHORIZED RETAILER* will be required to pay for all parts required to repair the product (labor will not incur a charge) providing the product is not older than 3 years from date of manufacture and is within 1 year from date of purchase. A copy of the original sales receipt is required.

In no event shall Lionel LLC be held liable for incidental or consequential damages.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

Instructions for Obtaining Service

If service for this Lionel LLC product is required, bring the item, along with your DATED sales receipt and completed warranty information (at the bottom of this page) to the nearest Lionel Authorized Service Station. Your nearest Lionel Service Station can be found by calling 1-800-4-LIONEL or by accessing the website at www.lionel.com.

If you prefer to send your Lionel product directly to Lionel, for repair you must FIRST call 586-949-4100 extension 2 or write to Lionel Customer Service, 6000 Victory Lane, Concord, NC 28027. Please have the 6-digit Lionel product number, the date of original purchase, the dealer where the item was purchased and what seems to be the problem. You will receive a return authorization (RA) number to ensure your merchandise will be properly tracked and handled upon receipt at Lionel LLC.

Once you have your Return Authorization (RA) number, make sure the item is packed in its original Styrofoam inner container which is placed inside the original outer display box (this will help prevent damage during shipping and handling). This shipment **MUST** be prepaid and we recommend that it be insured with the carrier of your choice.

Please make sure you have followed all of the above instructions carefully before returning any merchandise for service. You may choose to have your product repaired by one of Lionel LLC's Authorized Service Stations after its warranty has expired. A reasonable service fee should be expected once the product warranty has expired.

Warranty Information

Please complete the information below and keep it, along with your **DATED ORIGINAL SALES RECEIPT**. You **MUST** present this form **AND** your **DATED SALES RECEIPT** when requesting warranty service.

*A complete listing of Lionel Authorized retailers can be found by calling 1-800-4-LIONEL or by visiting our website at www.lionel.com.

Products that are more than 3 years old, from date of manufacture, are not applicable for warranty coverage, even if they have never been sold prior to this date. (Under no circumstance shall any components or labor be provided free of charge.)

Name _____

Address _____

Place of Purchase _____

Date of Purchase _____

Product Number _____



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